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*Published in:*  
Disability and Rehabilitation

*DOI:*  
[10.3109/09638288.2010.541547](https://doi.org/10.3109/09638288.2010.541547)

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*Document Version*  
Publisher's PDF, also known as Version of record

*Publication date:*  
2011

[Link to publication in University of Groningen/UMCG research database](#)

### *Citation for published version (APA):*

Noordik, E., Nieuwenhuijsen, K., Varekamp, I., van der Klink, J. J., & van Dijk, F. J. (2011). Exploring the return-to-work process for workers partially returned to work and partially on long-term sick leave due to common mental disorders: a qualitative study. *Disability and Rehabilitation*, 33(17-18), 1625-1635.  
<https://doi.org/10.3109/09638288.2010.541547>

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RESEARCH PAPER

## Exploring the return-to-work process for workers partially returned to work and partially on long-term sick leave due to common mental disorders: a qualitative study

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Accepted November 2010

### Abstract

**Purpose.** We conducted a qualitative study into the return-to-work process of workers partially on sick leave due to common mental disorders. Our objectives were to describe the barriers to a full return to work, solutions, communicating to the working environment and the aim of a full return to work, all as perceived by the workers.

**Method.** Workers who had partially returned to work and were partially on long-term sick leave due to a stress-related, anxiety or depressive disorder were eligible for this study. Fourteen workers were interviewed and the interviews were transcribed verbatim and coded.

**Results.** The perceived main barriers were: inability to set limits, recognise exhaustion and to control cognitions and behaviour such as perfectionism. A general pattern in the process was that all workers perceived barriers to a full return to work; most workers were able to mention solutions; all workers aimed for a full return to work, and after some time all workers were met with sufficient understanding and social support from their supervisor and health care professional. However, hardly any worker intended to implement or utilise the solutions at the workplace, except the structural adaptations of the work demands.

**Conclusions.** The pattern we found suggests a critical intention–behaviour gap between solutions and intentions for a full return to work and its implementation at work. This implies that we should develop new interventions that focus on helping workers and their environment to bridge this gap.

**Keywords:** *Return to work, sick leave, stress, mental disorders, occupational health*

### Introduction

Common mental disorders (CMDs), such as depressive, anxiety and stress-related disorders have a substantial impact on individuals, companies and society in general. The prevalence of CMDs is high, and they are generally associated with long-term sick leave [1–4]. There is limited knowledge about predictive factors for returning to work [5,6], the effectiveness of interventions on work-related outcomes [7–12] and the cause of the relatively long period before return to work. Studies that have evaluated clinical treatments for CMDs, including cognitive behavioural therapy (CBT) and pharma-

cotherapy, have demonstrated that symptoms can be reduced effectively. However, these treatments neither automatically reduce absenteeism or impaired work functioning, nor do they automatically increase productivity at work [13–17]. A major part of the existing body of knowledge on the return-to-work process is based on studies of patients with pain-related injuries and musculoskeletal disorders. There is a lack of research on workers with CMDs [6,18].

Several authors completed randomised controlled trials to evaluate the effectiveness of a work-directed intervention programme for workers on sick leave due to stress-related disorders [8,11,12], major

depressive disorders [11] and CMDs [10]. In three studies, a reduced duration of the return-to-work process was identified as an effect of the intervention programme [8,11,12]. The difference in median time until full return to work compared to the control group in two studies on stress-related disorders was, respectively, 198 days [8] and 16 days [12]. For major depressive disorders [11], the difference in mean time until work resumption was 92 days. The interventions had three elements in common, aimed at encouraging a full return to work: improving problem-solving behaviour related to return-to-work barriers, restoring contact with the workplace and a gradual increase of working hours. We considered these ingredients as the core of the intervention programmes. Work-directed interventions seem promising for achieving an earlier return to work and increasing productivity, especially if these interventions are aimed at work-related problems [8,11,12,19]. In one other study [10], there was no difference between the intervention and control group on the time to full return to work. In this study, the work-directed intervention was beneficial only for workers with stress-related disorders, not for workers with anxiety or depressive disorders. Studies evaluating similar cognitive-behavioural intervention programmes that lack a work-directed focus showed no reduction in the time to return to work compared to care as usual [7,9]. Therefore, work-directed interventions might be more effective than interventions lacking a focus on work. Having in-depth knowledge of the return-to-work process including the perceptions and actions of the worker involved and the factors that are perceived as encouraging or discouraging return to work could support the further development of work-directed interventions and may help to differentiate specific interventions for subgroups.

Return to work can be considered as a complex multifactorial process [20,21] which can also be characterised as a dynamic interactive problem-solving process including the worker and the social and material work environment within a specific socio-cultural context [22]. This implies that in order to better understand the workers' capacities to deal with difficulties in work functioning and in full return-to-work processes, we first need to gather information about cognitions, emotions and behaviour during these processes. Second, we need to gather information about the interaction and communication at home, at work and in the healthcare environment. Most processes are at least partly determined by a country-specific compensation policy and health care system.

We conducted a qualitative study on the return-to-work process of workers who have partially returned to work and are still partially on long-term sick leave

due to CMDs. These workers, in the middle of the process towards full return to work, are an interesting group to study, especially those workers who are not proceeding to a full return to work as fast as may be expected. According to the guidelines for CMDs of Dutch occupational physicians (OPs), 75% of the workers on sick leave due to stress-related disorders who received a work-directed intervention will have been fully returned to work after 3 months [12]. Developing an anxiety or depressive disorder as classified by the Diagnostic Statistical Manual of mental disorders (DSM) IV may be a reason for stagnation to full return to work [5].

The research questions were as follows:

1. What barriers to a full return to work do workers perceive who have partially returned to work and are partially on sick leave due to CMDs? What cognitions, emotions and behaviour do they have during the return to work process?
2. Do these workers perceive solutions to the barriers they perceive during the return-to-work process? If so, which solutions are preferred?
3. How do the workers and their work, home and healthcare environment interact and communicate regarding return to work? To what extent are these interactions and communications experienced as supportive?
4. What are the workers' intentions regarding full return to work?

## Methods

To optimise the transparency of the study, we described its socio-cultural context and used the consolidated criteria for reporting qualitative research (COREQ) [23] as a point of reference.

### *Socio-cultural context*

According to the Dutch Working Conditions Act, each Dutch worker on sick leave has the right to receive support from an OP. If the expected time to return to work is long, (e.g. longer than 2 weeks) most workers have to visit an OP in compliance with the obligatory company's sick leave policy. To stimulate a full return to work, OPs usually recommend that workers on sick leave due to CMDs return to work gradually, which means a phased return to work through a gradual increase in the number of working hours according to a time-contingent return-to-work schedule. This recommendation is based on the guideline for Dutch OPs

concerning workers on sick leave due to CMDs [24]. This guideline is based on the principles of stress inoculation training, cognitive restructuring, graded activity and time contingency [25,26]. In addition to visiting an OP, many workers visit their general practitioner. Each Dutch worker on sick leave is entitled to wage compensation or a disability pension if he or she cannot work due to (mental) health problems irrespective of the cause, e.g. a work-related or a non-work-related condition. Workers receive wage compensation of at least 70% of their earnings for a maximum of 2 years from their employer. If a full return to work has not been accomplished within 2 years, workers may be eligible for a disability pension from the Social Security Office. To receive a disability pension, the worker and employer have to prove that they were unable to reduce the duration of sick leave any further. If the Social Security Office judges the evidence as insufficient, the employer has to continue to pay wage compensation.

### Participants

We included workers on sick leave for more than 3 months due to a stress-related disorder as classified by the guidelines of the Netherlands Society of Occupational Medicine (NVAB) [24] or due to an anxiety, depressive or adjustment disorder as classified by the DSM IV. The workers needed to have partially returned to work at the moment of inclusion with a maximum of working 80% of the contracted working hours.

To recruit workers for this study, we used a convenience sampling strategy through which we obtained diversity on personal and job characteristics (age, gender and profession) and a variety in the percentages of work resumption. Workers were approached and recruited face-to-face by their own OP.

### Procedure

The OP invited a worker to participate in the study and explained the research aims and practical consequences. After the invitation, workers received a written information brochure. After giving informed consent, workers were invited by researcher EN for a confidential face-to-face interview of about 1 h at home or at a quiet location at the Academic Medical Centre in Amsterdam. No other people were present during the interview. EN interviewed all workers. At the start of the study EN – male, 43 years, educated as a health scientist – was a PhD student. Eight interviews were held in 2006 and seven in 2008. All interviews, except one, were audio taped. During

one interview the recorder was out of order; therefore, we summarised the interview directly afterwards. We used a semi-structured interview based on a topic list. The list included questions on personal and job characteristics, current and former sick leave due to mental disorders, aspects of the return-to-work process covering (i) the barriers for proceeding to a full return to work, (ii) preferred solutions, (iii) the extent to which interactions and communication with family, friends, colleagues, supervisors and various healthcare professionals were perceived as supportive and (iv) the intentions and plans to proceed to a full return to work. The topics and questions are presented in Appendix 1.

### Analysis

The recorded interviews were transcribed verbatim. In our text analysis, we used an explorative and inductive approach based on the grounded-theory research paradigm of Glaser and Strauss [27–29]. We sought to find a pattern in the return-to-work process of the included workers. Furthermore, we analysed the first three interviews and used the results to shape and focus the interviews thereafter. To develop a code structure, we combined this approach with the topics of the topics list. The final code structure is presented in Appendix 2. All verbatim texts of the interviews were manually coded line by line by EN. We used MaxQda2 software as a tool to code the verbatim text of the interviews. To improve the trustworthiness or reliability of the coding, we used investigator-triangulation [30] as EN and IV each independently coded the verbatim text of three interviews. After comparing and discussing differences in the coded text, we decided to recode parts of the text and to redefine some codes.

To answer the research questions, we clustered quotes that were coded as barriers, solutions, communications and intentions. EN clustered the quotes of all interviews. Within each cluster, we searched for categories that were representative of that cluster. To improve the trustworthiness of the clustering and categorisation, researcher KN also independently coded five randomly selected interviews. Differences in interpretation were discussed in the research team until a consensus was reached. The clusters and categories were derived from the data.

### Results

After describing the characteristics of the study population, we present four main themes of the return-to-work process and one or two categories within each theme that emerged from the data.

These themes and categories are considered relevant for a better understanding of the return-to-work process of the included workers. The four main themes that we hypothesised (see Appendix 1) also emerged from our data as being relevant in reaching a full return to work (see Appendix 2). The four main themes we found are: barriers, solutions, intentions for a full return to work and communications with the home, work and health care environments. Thereafter, we present a conceptual model of the return-to-work process that already has been postulated in a guideline for mental health problems of workers [24]. The model has a function to show a common pattern in the return-to-work process as we found in this study, and demonstrates how the four main themes are interrelated.

### Study population

Fifteen workers were recruited by 11 OPs to participate in the study. The OPs were employed by nine different Occupational Health Services throughout the country. Nine OPs included one worker each, and three OPs included two workers each. One worker was excluded from the study after the interview as he had fully returned to work at the time of the interview (worker G). Ten women and four men participated in the study. The ages ranged from 25 to 58, with a mean age of 38 years. Six workers had completed a high level of education (university), six workers a moderate level (secondary education, post-secondary education), and two workers a low level (secondary education, vocational school). Eight workers were married or cohabitants and six workers were single. Five of the married workers and one of the single workers had one or more children living with them. The workers were employed in 14 different jobs across various sectors and branches. Four workers were employed in different jobs within the healthcare sector. The mean time to a partial return to work was 4 months (range 1 day to 12.5 months). The mean duration of the partial return to work period since the latest extension of working hours was 3 months (range 1 week to 18 months). At the time of interview, the mean duration of sick leave was 8 months (range 3.5–14 months) and the mean percentage of working hours relative to the contracted working hours was 48% (range 25–75%). So it appeared that we included a heterogeneous population with varied personal and job characteristics.

### Barriers

We found that workers mentioned various barriers to a full return to work and for being partially on

long-term sick leave. These barriers can be summarised into two categories: barriers that are related to the difficulty of protecting themselves from exceeding their current capacity, and barriers that are related to the current decreased work capacity due to mental or physical symptoms. One worker described the first category of barriers by stating: 'If you have going on for years and suddenly you have to set limits, it's really hard'; 'That's my pitfall. I have to guard my own limits, but I do cross them once in awhile'. The same worker described the second category of barriers by stating: 'My concentration is reduced during a long conversation'.

*Difficulty of protecting oneself from exceeding the current capacity.* The main barriers that workers mentioned related to protecting themselves from exceeding their current capacity were that it is difficult to set limits in a demanding situation (behaviour), to recognise that their current capacity has been exhausted (cognition), and having fear-avoidance behaviour of a specific work task (emotion and behaviour). One worker stated that the main problem was perfectionism (cognition).

Besides these main barriers, all workers mentioned one or more additional cognitive or behavioural barriers that were perceived as impeding their progress. To deal with a demanding work situation, several workers mentioned a cognitive barrier such as perfectionism. Furthermore, many workers mentioned additional behavioural barriers such as difficulty in slowing down the work pace and checking their own actions frequently, taking over responsibilities or putting in extra effort.

*A current decreased capacity.* There were various mental and physical symptoms that decreased the current working capacity. Workers mentioned mainly that they were tired or exhausted or had reduced concentration. Other symptoms were fear or anxiety, agitation, depression, feeling insecure, feeling irritated, having headaches, being confused and forgetful, having multiple physical symptoms such as a spastic colon, restless legs, neck/shoulder pain or a lack of endurance power.

### Solutions

The various solutions workers preferred were aimed at becoming more relaxed and less tense at work and at getting adequate treatment for their mental or physical symptoms. We considered these two types of solutions as two different categories. Three workers mentioned they had not yet found adequate solutions.



*Getting more relaxed and less tense.* The preferred solutions for becoming more relaxed and less tense were directed at the structural adaptation of work demands, such as extra manpower, reducing the commuting distance, adaptation of the job content (i.e. switching to another job at another workplace), or increasing autonomy to decide on hiring extra manpower. Workers also mentioned three ways of learning a new way of dealing with work demands: (1) learning a new way of thinking (cognition) about a demanding situation, (2) learning a new way of reacting overtly (behaviour) to a demanding situation and (3) learning a new way of dealing with emotions and relaxing after having dealt with a demanding situation.

Nine workers wanted to learn a new way of thinking to become less tense. One of these workers mentioned learning to accept a demanding situation if it could not be changed. Other solutions workers mentioned were learning to perceive a failure as a work problem and not taking it personally, learning to let someone else solve their own problems instead of taking them over, learning to prioritise personal and pleasant issues instead of working, learning to question the reality of one's automatic negative thoughts, learning not to think or say so often 'I have to do it well, I must not fail', or learning that it is not necessary to please everyone and that it is allowed to refuse a request.

Workers who wanted to learn a new behaviour for a demanding situation stated that they were learning to focus on the activities they were doing at that very moment, to take timely breaks, to react more assertively and give their own point of view, to prepare decisions by consulting with the supervisor and colleagues more often and to take responsibility for their decisions, to inform their supervisor earlier when feeling overloaded, to manage the expectations of customers about their professional role and what is part of the job, and to react more assertively to hostile clients.

Workers who were learning a new way of dealing with emotions wanted to accept their feelings about a demanding situation without being focused on satisfying the needs and expectations of others. Workers learning a new way of relaxing wanted to slow down their lifestyle, meditate, and maintain a structured daily rhythm, doing relaxation exercises or doing leisure activities regularly such as reading a book, smoking a cigarette or physical exercise like walking or cycling.

*Treating mental or physical symptoms.* To treat mental or physical symptoms workers mentioned using sleep medication, antidepressant medication, acupuncture to treat a spastic colon or physiotherapy to treat neck/shoulder pain. One worker received vitamins and

physiotherapy exercise prescribed to increase physical fitness and endurance capacity. Another worker noticed that a medical diagnosis and a metaphor were helpful in understanding symptoms of exhaustion.

#### *Communication at work, at home and in healthcare*

All workers communicated about returning to work with their supervisor, colleagues, family, friends and with two or more healthcare professionals, mostly an OP and a psychologist, psychiatrist or social worker.

All workers stated that they needed support; they needed understanding for their symptoms and decreased work capacity and support for their solutions to become more relaxed and less tense. Most workers also needed support for their intention to carefully extend the number of working hours or tasks. Most workers eventually received understanding and support from one or more friends or family members, supervisors and colleagues and various healthcare professionals. One worker described receiving understanding by stating: 'Understanding is the most important ... from the people at work, [my] colleagues, supervisor, and occupational health [staff], ... understanding ... for not being able to do something, ... that it is accepted anyway ... At our place it is accepted ... by colleagues'.

Workers perceived the interactions with various actors in their environment as varying from supportive to unsupportive. Both types of interactions are illustrated with some examples.

*Supportive communication.* A balance between encouraging a full return to work and discouraging in order to prevent a premature return to work was appreciated by various workers. For one worker, the occupational health professional was encouraging and the supervisor was discouraging. Workers appreciated contact between a healthcare professional and the workplace; for example, a healthcare professional visited the workplace to give information about the consequences of a medical diagnosis to a supervisor. Another professional joined the worker at an appointment with the supervisor as an independent third party in order to observe the dialogue between them and give the worker feedback about the non-verbal behaviour of the supervisor. Furthermore, introducing a case manager to adjust and coordinate the support given by various actors if support was getting confused for the worker was appreciated. One worker received substantial support from conversations with the supervisor and psychologist about training new behaviour at the workplace. This worker stated that 'A good psychologist recommended by my employer ... was really

useful ... [I] agreed with ... my psychologist ... and a new supervisor ... to make a schedule for taking pauses during the days I have to work [and] ... that I have to take the pauses at the scheduled times [and] ... write down ... what has been going well and what did not go so well or what I can improve next time ... I will monitor the difficult moments ... And every two weeks, [I have] ... a meeting ... with my supervisor regarding my monitoring diary ... He has to be informed about my feelings, experiences, and tiredness and how it is ... really with me ...'.

*Unsupportive communication.* A few workers perceived little understanding or support. Others reported a lack of understanding or support at various moments in the process, but this changed into supportive interactions during the process. Based on these statements, we may conclude that half of the workers wanted the supportive communication with their supervisor and occupational health professional to be improved.

One worker perceived hardly any understanding and support from his supervisor and colleagues, as he had to wait months for the assistance of occupational health professionals due to unclear company procedures. The supervisor paid little attention to the process, and the worker hardly knew his colleagues due to a high turnover rate. Another worker had regular quarrels with the supervisor before sick leave, and these continued during the return-to-work process. In an atmosphere of discordance, the worker perceived the announcement of the Occupational Health Service to visit the OP on the request of the employer after 2 days of sick leave as a sign of distrust and lack of understanding for the severity of the symptoms and decreased work capacity.

The level of understanding and support can change as a result of being pushed to proceed into supportive communication. For example, a worker did not perceive any support from the OP as the worker was pushed to proceed to return to work, even though the worker felt vulnerable. Later on, the OP changed his communication to understanding and support. Other workers perceived that the supervisor put pressure on them to proceed to a full return to work. The supervisor of one worker started to talk about dismissal. Later on this changed when they were talking about a return-to-work plan.

#### *Intentions and plans to proceed to a full return to work*

We found that all workers had a positive attitude about proceeding to a full return to work in the near future, e.g. next 3 months. Some had planned or instituted arrangements with the employer to reintegrate according to a time schedule, while others had

no time schedule. Three workers doubted that they would proceed to a full return to work as they had not yet found adequate solutions for their main problem(s): 'getting exhausted' and 'exceeding their current capacity'. Most workers preferred to 'extend the amount of working hours or tasks carefully'. Most of these workers wanted to have the possibility to adjust the return-to-work schedule or the intensity of increasing the workload after evaluating the previous increase of the workload. A few workers stated explicitly that 'extending the work load carefully' was important for them to gain confidence in handling each step of increased workload. Of all workers who had the intention to extend their working hours, only two planned to utilise their solutions in the workplace.

#### *Pattern in return-to-work process*

The return-to-work process as a whole can be described as a sequence of experiencing barriers to a full return to work, finding the solutions for these barriers, developing intentions to full return to work, and thereafter practicing and utilising the solutions and intentions in the workplace [24,25]. This is a process that is unique for every worker and mediated by the supportive and unsupportive communications they receive from the home, work and healthcare environment. On an individual level, we noticed that all workers were able to mention a set of barriers, most workers were able to mention preferred solutions, and most workers eventually received understanding for their barriers and social support for their solutions and intentions to full return to work; however, hardly any worker intended to implement or utilise their solutions in the workplace, except for the structural adaptations of the work demands. Therefore, we formulated a conceptual model representing the return-to-work process consisting of a sequence of barriers, solutions, communications, intentions and implementation of intentions and solutions. The model demonstrates the crucial intention-behaviour gap that we found, between the solutions and intentions and the implementation of these in the workplace in order to gain a full return to work (Figure 1).

The barriers that workers mentioned were first that they experienced difficulty protecting themselves from exceeding their current capacity, and second their current decreased work capacity due to symptoms. This is considered the first phase of the return-to-work process (Figure 1). After becoming aware of the barriers, workers looked for preferred solutions to lifting these barriers. Solutions were aimed at treating symptoms and at getting more

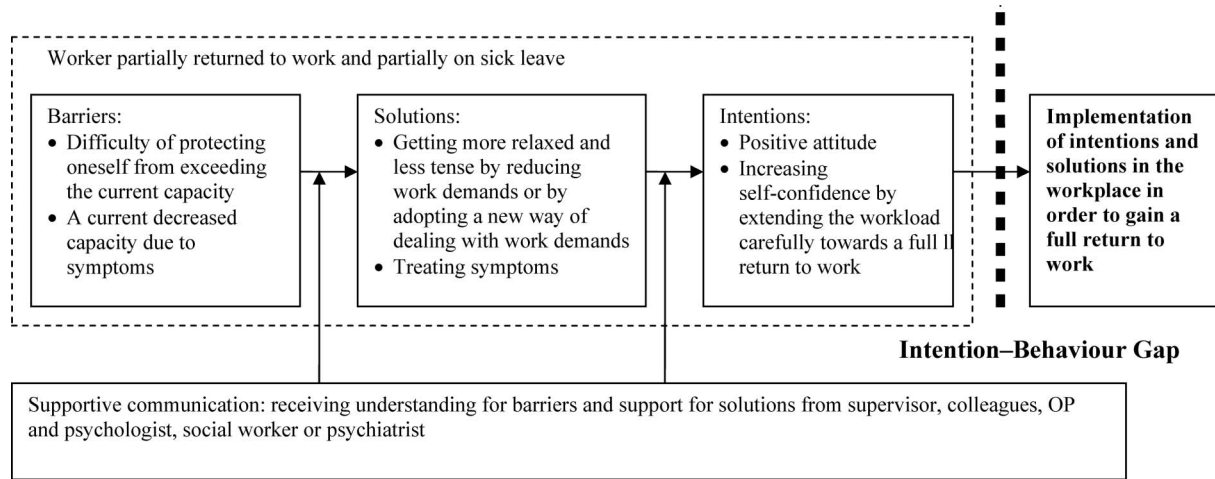


Figure 1. Conceptual model of the return-to-work process of workers who have partially returned to work and are partially on long-term sick leave.

relaxed and less tense by reducing work demands or by adopting a new way of dealing with work demands. This is considered the second phase of the return-to-work process. Developing intentions for a full return to work is considered the third phase of the process. We postulated that having a positive attitude and an increasing self-confidence by extending the workload carefully towards a full return to work are prerequisites for the intent to proceed. Implementing the intentions and solutions in the workplace in order to gain a full return to work is considered the fourth phase of the process. The mediating influences of communication with healthcare professionals, supervisors, and colleagues are presented by the vertical arrows in Figure 1. Workers needed supportive communications that gave them understanding of their barriers, and support for their solutions. Workers with the intent to proceed to a full return preferred to carefully extend the amount of working hours or tasks. The return-to-work plans are the result of negotiations between the supervisor and the worker (vertical arrow between intentions and implementation). The intention-behaviour gap is represented by a prominent dotted vertical line between the workers' solutions and intentions on the one hand, and utilising these in order to gain a full return to work on the other.

## Discussion

To better understand the return-to-work process and to answer the first question regarding the barriers to a full return to work, we identified two categories of barriers. Workers stated that they experienced difficulty protecting themselves from exceeding their current capacity and had a current decreased working capacity due to mental or physical symptoms

such as tiredness and reduced concentration. The main barriers related to the difficulty of protecting themselves were, it is hard (i) to set limits in a demanding situation (behaviour), (ii) to recognise that the current capacity is exhausted (cognition) and (iii) to control cognitions such as perfectionism. Fear-avoidance behaviour was mentioned by one worker (emotion and behaviour).

In answer to the second question regarding the solutions, we found that workers preferred solutions that were aimed at becoming more relaxed and less tense, and at receiving adequate treatment for mental or physical symptoms. To become more relaxed and less tense, workers preferred to adapt their work demands by switching to another job or by learning a new way of dealing with work demands, including learning a new cognition, e.g. not taking a failure at work automatically as a personal failure.

In answer to the third question regarding communication with the social environment, we found that workers needed understanding for their symptoms and decreased capacity to work and support for their solutions to become less tense from the supervisor, colleagues (communication at work), family and friends (communication at home) and healthcare professionals. A healthcare worker having contact with the workplace was perceived as supportive but a supervisor who is pushing to proceed to a full return to work as unsupportive. Eventually, 12 out of 14 workers received understanding and social support, while two workers received little help. During the return-to-work process, healthcare professionals and supervisors may change their communications to more understanding of the workers' barriers and more support of the workers' solutions; however this may take some time.

In answer to the fourth question about intentions, we found that workers who had already prepared



return-to-work plans with their supervisor preferred to extend the amount of working hours or tasks carefully. All workers had a positive attitude towards a full return to work, but not every worker had prepared plans. A few were still looking for adequate solutions.

By looking at the process of each individual worker as a sequence of experiencing barriers, finding solutions, dealing with communications of the environment, making intentions for a full return to work and implementing the intentions and solutions in the workplace, we can conclude that all workers in the study mentioned a set of barriers and most workers found solutions. Furthermore, most workers experienced support by significant others. However, hardly any worker managed to utilise their solutions in the workplace despite positive attitudes. Therefore, as an explanation for the stagnation of the return-to-work process of workers partially returned to work, we postulate the existence of a crucial intention-behaviour gap between having solutions and intentions, and implementing these in the workplace.

The barriers concerning difficulty in protecting themselves from exceeding the current capacity, the solutions aimed at becoming more relaxed, and the perceived lack of understanding and support at various moments are similar to the types of obstacles and solutions Van Oostrom et al. [31] identified for workers on sick leave due to distress. They found that workers gave the highest priority to solving obstacles concerning mental workload (16% of all obstacles) and person-related stress factors (24%) as well as to solutions concerning communication (20% of all solutions) and training (20%). The communications that workers indicated they needed in this study (understanding of symptoms and decreased capacity, and support for solutions) are congruent with the findings of Lysaght and Larmour-Trode [32] on emotional and instrumental support. Furthermore, Lysaght and Larmour-Trode distinguished informational support, which is defined as receiving information about procedures and work requirements, and appraisal support, that consisted of receiving feedback on progress. Workers in this study did not mention aspects of informational support. Appraisal support was mentioned twice by workers in their return-to-work plans in terms of evaluating progress.

The pattern we found in the return-to-work process suggests that we have to focus on bridging the overall intention-behaviour gap to reduce the time to a full return to work for workers who have partially returned to work and remain partially on long-term sick leave. To develop suitable interventions, we need to use the available knowledge for motivating workers to implement solutions in the

workplace, in addition to promising work-directed interventions [8,11,12]. A positive attitude towards the return to work, high social support and a high self-efficacy seem to be the relevant motivational factors associated with reduced time to a full return to work [33]. Furthermore, monitoring progress as part of a self-regulatory strategy can also be considered as a factor that is helpful for acquiring or maintaining solutions [34]. When we compare the results of our study with these motivational factors, we may consider that the workers in our study did not have a lack of a positive work attitude towards the return to work. The understanding and support workers received in our study could be improved for half of the workers, especially communication with their supervisor and the occupational health professional. The self-efficacy to return to work of the workers in our study could possibly be improved, as most workers stated that they preferred to extend their workload carefully. Some of them explicitly stated that they wanted to do this in order to gain confidence in implementing their solutions. Monitoring the progress of the return-to-work process could also be improved, as several workers stated that they wanted to evaluate every next step of an increased workload. Therefore, to bridge the intention-behaviour gap, we need to develop work-directed interventions that allow workers to carefully extend their workloads in order to gain confidence or self-efficacy to return to work by implementing the solutions in the workplace and in which monitoring progress is part of a self-regulatory strategy.

### Limitations

By interviewing workers only about their return-to-work process, we are biased towards the perspective of the individual worker. Adding the perspective of the involved employers or supervisors and healthcare professionals could enrich our findings further. As illustrated by our findings these actors play a crucial role in supporting or frustrating the return-to-work process. Furthermore, the results of this study might be biased by the perspective of female workers (ten out of fourteen) and workers with a moderate to high level of education (12 out of 14), and by including only workers with a positive attitude to proceed to a full return to work. In addition, one must be aware that we studied the return-to-work process of workers within the Dutch culture where all involved participate in the social security and healthcare system of the Netherlands. This context should be taken into consideration before transferring the results to workers in other countries.

In this study, we have focused on the barriers, solutions, communications, intentions and implementation of solutions and intentions in the

workplace perceived from the perspective of the workers. Future qualitative research on the return-to-work process should also focus on the perspective of the supervisors and healthcare professionals. These actors appear to have a crucial mediating influence on the process by giving their understanding and support at various moments in the process.

### Declaration of interest

This study was supported by STECR Aladdin programme. This study was initiated in collaboration with the Netherlands School of Public and Occupational Health (NSPOH) and various Occupational Health Services: ArboUnie, Commit, Maetis, Achmea-Arbo, ErasmusMC, AMC, HumanCapitalCare, MartiniMC, KLM Health Services.

### References

- Andlin-Sobocki P, Wittchen HU. Cost of anxiety disorders in Europe. *Eur J Neurol* 2005;12(Suppl 1):39–44.
- Bijl RV, Ravelli A. Current and residual functional disability associated with psychopathology: findings from the Netherlands Mental Health Survey and Incidence Study (NEMESIS). *Psychol Med* 2000;30:657–668.
- Buist-Bouwman MA, de Graaf R, Vollebergh WA, Alonso J, Bruffaerts R, Ormel J. Functional disability of mental disorders and comparison with physical disorders: a study among the general population of six European countries. *Acta Psychiatr Scand* 2006;113:492–500.
- Kessler RC, Chiu WT, Demler O, Merikangas KR, Walters EE. Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry* 2005;62:617–627.
- Nieuwenhuijsen K, Verbeek JH, de Boer AG, Blonk RW, van Dijk FJ. Predicting the duration of sickness absence for patients with common mental disorders in occupational health care. *Scand J Work Environ Health* 2006;32:67–74.
- van der Klink JJ. Back in balance. The development and evaluation of an occupational health intervention for work-related adjustment disorders [Thesis/Dissertation]. Amsterdam: Coronel Institute, AMC-UvA; 2002. pp 71–90.
- Bakker IM, Terluin B, van Marwijk HW, van der Windt DA, Rijmen F, van Mechelen W, Stalman WA. A cluster-randomised trial evaluating an intervention for patients with stress-related mental disorders and sick leave in primary care. *PLoS Clin Trials* 2007;2:e26.
- Blonk RWB, Brenninkmeijer V, Lagerveld SE, Houtman ILD. Return to work: a comparison of two cognitive behavioral interventions in cases of work-related psychological complaints among the self-employed. *Work Stress* 2006;20:129–144.
- Brouwers EP, de Bruijne MC, Terluin B, Tiemens BG, Verhaak PF. Cost-effectiveness of an activating intervention by social workers for patients with minor mental disorders on sick leave: a randomized controlled trial. *Eur J Public Health* 2007;17:214–220.
- Rebergen DS, Bruinvels DJ, Bezemer PD, van der Beek AJ, van Mechelen W. Guideline-based care of common mental disorders by occupational physicians (CO-OP study): a randomized controlled trial. *J Occup Environ Med* 2009;51:305–312.
- Schene AH, Koeter MW, Kikkert MJ, Swinkels JA, McCrone P. Adjuvant occupational therapy for work-related major depression works: randomized trial including economic evaluation. *Psychol Med* 2007;37:351–362.
- van der Klink JJ, Blonk RW, Schene AH, van Dijk FJ. Reducing long term sickness absence by an activating intervention in adjustment disorders: a cluster randomised controlled design. *Occup Environ Med* 2003;60:429–437.
- Furukawa T, Streiner DL, Young LT. Antidepressant plus benzodiazepine for major depression. *Cochrane Database Syst Rev* 2000;CD001026.
- Gava I, Barbui C, Aguglia E, Carlino D, Churchill R, de Vanna M, McGuire HF. Psychological treatments *versus* treatment as usual for obsessive compulsive disorder (OCD). *Cochrane Database Syst Rev* 2007;CD005333.
- Hunot V, Churchill R, Silva de LM, Teixeira V. Psychological therapies for generalised anxiety disorder. *Cochrane Database Syst Rev* 2007;CD001848.
- Stein DJ, Ipser JC, van Balkom AJ. Pharmacotherapy for social anxiety disorder. *Cochrane Database Syst Rev* 2000;CD001206.
- van der Klink JJ, Blonk RW, Schene AH, van Dijk FJ. The benefits of interventions for work-related stress. *Am J Public Health* 2001;91:270–276.
- MacEachen E, Clarke J, Franche RL, Irvin E. Systematic review of the qualitative literature on return to work after injury. *Scand J Work Environ Health* 2006;32:257–269.
- Nieuwenhuijsen K, Bültmann U, Neumeyer-Gromen A, Verhoeven AC, Verbeek JHAM, van der Feltz-Cornelis CM. Interventions to improve occupational health in depressed people. *Cochrane Database Syst Rev* 2008;CD006237.pub2.
- Muenchberger H, Kendall E, Grimbeek P, Gee T. Clinical utility of predictors of return-to-work outcome following work-related musculoskeletal injury. *J Occup Rehabil* 2008;18:190–206.
- Krause N, Frank JW, Dasinger LK, Sullivan TJ, Sinclair SJ. Determinants of duration of disability and return-to-work after work-related injury and illness: challenges for future research. *Am J Ind Med* 2001;40:464–484.
- Coutu MF, Baril R, Durand MJ, Cote D, Rouleau A. Representations: an important key to understanding workers' coping behaviors during rehabilitation and the return-to-work process. *J Occup Rehabil* 2007;17:522–544.
- Hoedeman R, Janssen J, Loo M, Nieuwenhuijsen K, Oei TS, van Rees E, van Rhenen W, de Roos L, Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care* 2007;19:349–357.
- van der Klink JJL, Ausems CMM, Beijderwellen BD, Blonk R, Bruinvels DJ, Dogger J, Hoedeman R, Janssen J, Loo M, Nieuwenhuijsen K, Oei TS, van Rees E, van Rhenen W, de Roos L. Guidelines for the management of mental health problems of workers by occupational physicians [In Dutch: Nederlandse Vereniging voor Arbeids- en Bedrijfsgezondheidskunde (NVAB): Richtlijn handelen van de bedrijfsarts bij werkenden met psychische problemen]. Utrecht: NVAB [Netherlands Society of Occupational Medicine]; 2007.
- van der Klink JJL, van Dijk FJH. Dutch practice guidelines for managing adjustment disorders in occupational and primary health care. *Scand J Work Environ Health* 2003;29:478–487.
- Meichenbaum D, Novaco R. Stress inoculation: a preventative approach. *Issues Ment Health Nurs* 1985;7:419–435.
- Glaser B, Strauss AL. The discovery of grounded theory: strategies for qualitative research. New York: Aldine Publishing Company; 1967.
- Pope C, Ziebland S, Mays N. Qualitative research in health care. Analysing qualitative data. *BMJ* 2000;320:114–116.
- Eaves YD. A synthesis technique for grounded theory data analysis. *J Adv Nurs* 2001;35:654–663.

30. Tobin GA, Begley CM. Methodological rigour within a qualitative framework. *J Adv Nurs* 2004;48:388–396.
31. van Oostrom SH, van MW, Terluin B, de Vet HC, Anema JR. A participatory workplace intervention for employees with distress and lost time: a feasibility evaluation within a randomized controlled trial. *J Occup Rehabil* 2009;19:212–222.
32. Lysaght RM, Larmour-Trode S. An exploration of social support as a factor in the return-to-work process. *Work* 2008;30:255–266.
33. Brouwer S, Krol B, Reneman MF, Bultmann U, Franche RL, van der Klink JJ, Groothoff JW. Behavioral determinants as predictors of return to work after long-term sickness absence: an application of the theory of planned behavior. *J Occup Rehabil* 2009;19:166–174.
34. Sniehotta FF, Scholz U, Schwarzer R, Fuhrmann B, Kiwus U, Voller H. Long-term effects of two psychological interventions on physical exercise and self-regulation following coronary rehabilitation. *Int J Behav Med* 2005;12:244–255.

## Appendix 1. Topic list and interview questions in a semi-structured interview on the return-to-work process

### *Personal and work characteristics*

- Gender
- Age
- Education
- Civil status
- Living situation
- Occupation
- Number of years working in current job
- Number of years working with current employer
- Number of contracted hours per week
- Tasks

### *Current and former sick leave due to mental health*

- Starting date of sick leave, initial reason for sick leave, perceived cause of sick leave
- Former sick leave due to mental health complaints
- Former return-to-work schedule

### *Return-to-work process*

- Current number of working hours
- Duration of working the current number of working hours
- Doing your own job or adapted tasks?
- Which tasks can be performed well?
- Which tasks or work situations are difficult or not feasible yet?
  - Why?
  - What exactly makes the task or situation difficult or stressful? For what reasons?
  - How do you cope with a difficult/stressful/threatening situation?
  - Do you tend to prevent exposure to a difficult/stressful situation? If yes, how are you doing this (behaviour)?

- Examples
- How do you think (cognition) and/or feel (emotion) about a work situation that is not feasible?
- What measures are being taken to (full) return to work?
  - Examples
  - Are your symptoms reduced by the measure?
  - Does your return to work progress by the measure?
- What are the opinions of the healthcare professionals (e.g. the occupational physician, psychologist, general practitioner, social worker, psychiatrist), family (e.g. partner or friends) and colleagues (e.g. supervisor or human resource advisor at work) about the return-to-work process?
  - What do they say about the return-to-work process until now?
  - What do they say about the return-to-work process in the near future?
  - Does it help you to achieve a full return to work?
- Are you positive about proceeding to a full return to work in the next three months? Why?
- If yes: Are you confident that you will fully return to work during the next three months? Why?
  - Have you made arrangements or plans to return to work during the next three months?
  - What arrangements, plans, or return to work schedule do you have?
  - Is it a feasible plan or schedule?
  - What conditions could help you to fully return to work?

**Appendix 2. Coding tree**

- Personal characteristics
- Work characteristics
  - Tasks
- Sick leave
  - Reason at start
    - Course of symptoms
  - Former sick leave
- Return to work
  - Feasible tasks
    - Hours working from the start
    - Own-Other job
- Difficult tasks or situations
  - Barriers
    - Emotion-Cognition
    - Avoidance behaviour
    - Other behaviour
- Solutions
- Communication at home
- Communication with healthcare professionals
- Communication at work
- Intent to return to work